## Clean, safe water for you-

When you turn on the tap, you can be assured that you and your family are drinking clean, high quality water. The City of Mesa takes its responsibility to provide safe drinking water seriously. Mesa carefully safeguards its water supplies, and, once again, we are pleased to report that our system is in compliance with all state and federal water quality regulations.

Please take a few moments to read through this brochure. It was developed to provide you with information about your drinking water. Your questions, comments, and suggestions are important to us. Contact information for the offices and agencies that can best assist you has been provided for your convenience.

### **Contact information**

City of Mesa home page - http://www.cityofmesa.org City of Mesa Water Quality Services - (480) 644-3481 or 2621 E-mail address - water.quality@cityofmesa.org Online water quality report -

http://www.cityofmesa.org/utilities/water/default.asp City of Mesa CAP Water Treatment Plant - (480) 644-3289 AZ Department of Environmental Quality - (602) 207-2300 Environmental Protection Agency - (800) 426-4791 Maricopa Co. Environmental Services Dept. - (602) 506-6666

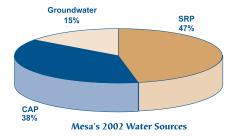
#### **En Espanol**

Si usted desea recibir esta información en español, tenga la bondad de llamar Lucy Lopez y pídale que le mande el folleto sobre el agua de la Ciudad de Mesa. Puede communicarse con ella llamando al (480) 644-3683.

### Mesa's water sources

Mesa is fortunate to have multiple water sources. They include surface water from Salt River Project (SRP) and Central Arizona Project (CAP) and 38 wells used to meet peak demands.

Additionally, Mesa recharges wastewater that is treated to near drinking water quality. This water seeps into the ground, through a process called artificial recharge, where it is stored for future use. Storing water underground is an important tool for managing Mesa's water resources and helps ensure an adequate supply for current and future needs.



### Wise water use

Living in a community that gets less than seven inches of rain each year, it is imperative that we use water wisely. We are in the fifth

year of a drought, and the reservoirs are below normal levels. Because of this, Mesa's surface water supplies have been reduced. To meet the needs of our customers, Mesa must use its groundwater reserves and purchase more costly water from CAP. Your



conservation efforts can help reduce high-cost water purchases and associated cost increases. Conserving today will reduce the need for new water sources in the coming years. For more than 100 water saving tips, visit www.wateruseitwisely.com.

#### Taste and odor

The City of Mesa can experience seasonal taste and odor problems associated with the drinking water. The safety of the water is not at risk; however, there is a perception that the water is questionable because it has an unpleasant smell or taste. The primary causes are Geosmin and Methylisoborneol (MIB), non-harmful, naturally occurring compounds associated with algae growth in lakes and canals.

To help eliminate taste and odor problems, powdered activated carbon (PAC) is added during the water treatment process. Regular analysis of water samples helps determine how much PAC to use and identifies necessary adjustments to the treatment process.

The City's goal is to eliminate taste and odor problems associated with the drinking water. We will continue to use new technologies and improve existing processes to meet this goal.

## Water hardness

Two common minerals in the Arizona soil—magnesium and calcium—dissolve in the water to create "hard water." In Mesa, it ranges from 12 gpg (grains per gallon) to 22 gpg, depending on the water source. Hard water poses no health risk but can be troublesome to consumers. It causes soap deposits in sinks and spots on dishes and faucets. Pipes, water heaters, and dishwashers can also be affected by calcium deposits.

The best way to reduce water hardness is to install an ion exchange water softener. There are many types of softeners available, so be sure to evaluate the performance capabilities of the product, as well as the reputation of the company. Once installed, it is important to follow the manufacturer's recommendations and service the unit regularly.

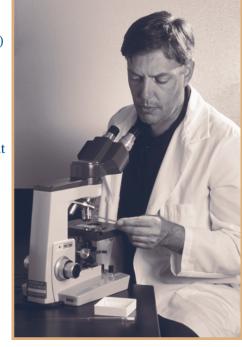
The high sodium content in soft water can damage landscaping, so landscape watering systems should be connected upstream of any water softener.

For more information about water softeners or other types of home water treatment units, contact City of Mesa Water Quality Services.

### Possible contaminants

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The EPA has also prepared a citizen's guide to drinking water called "Water on Tap: A Consumer's Guide to the Nation's Drinking Water."

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:



**Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

**Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

**Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

#### Taking special precautions

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

## More about arsenic

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

# In the news - MTBE

You may have recently heard or read about methyl tertiary butyl ether (MTBE), a possible water contaminant. Recent studies suggest that it may cause cancer. MTBE was widely used as a gasoline additive to reduce carbon monoxide and ozone levels caused by auto emissions. In some communities, fuel spills and leaking underground storage tanks resulted in the contamination of drinking water. To ensure the safety of our drinking water supplies, Mesa has tested all of its wells and water sources. No MTBE has been detected in any of our supplies.

# **Getting involved**

If you wish to provide input on water-related issues, the Mesa City Council meets at 5:45 p.m. the first and third Monday of each month in Council Chambers, located at 57 E. First St., unless otherwise noted. For a complete meeting schedule, visit http://www.cityofmesa.org/calendar/calendars.asp.



The City of Mesa, along with other Valley municipalities and organizations, promotes the safety, convenience and value of tap water through the Tap into Quality program. To learn more about Valley water supplies, sources, and test results, visit www.tapintoquality.com.

## Water quality data

The table below lists drinking water contaminants detected during the calendar year for this report (January – December, 2002). The presence of contaminants does not necessarily indicate that the water poses a health risk.

Parameter	MCL	MCLG	City Zone		East Zone			Groundwater			
(Values listed in mg/L			Averege Berry		Avenage		Danas			Danne	
unless noted)			Average	Range	Avera		Range	Ave		Range	
Arsenic	0.05	N/A	0.0028	N/A	<0.00		N/A	0.00		0.004-0.033	
Asbestos	7 MFL	7 MFL	<0.2	N/A	<0.2		N/A	0.		0.01-1.12	
Barium	2.0	2.0	0.08	N/A	0.1		N/A	0.03		0.003-0.064	
Calcium	**	N/A	139	82-180	185		180-188	51		6-140	
Chlorides	**	N/A	69	N/A	78		74-86 224		24	17-380	
Chlorites	1.0	0.8	N/A	N/A	0.12		<0.10-0.21	N/	Ά	N/A	
Chromium	0.1	0.1	<0.001	N/A	<0.00	5	N/A	0.013		0.003-0.025	
Copper	1.3+	N/A	0.0034	N/A	<0.0	1	N/A	<0.02		N/A	
Di(2-ethylhexyl)phthalate	0.006	0	<0.0005	N/A	<0.000	06	N/A	0.00	023	0.0006-0.0058	
Fluoride	4.0	4.0	0.36	N/A	0.74		0.49-0.87	0.42		0.09-1.8	
Gross Alpha (pCi/L)	15	N/A	3.1	N/A	5.2		N/A	2.8		0.6-11.3	
Haloacetic Acids (HAAs)	0.06	N/A	0.011	<0.005027	0.013	0.013 < 0.005032		N/A		N/A	
Hardness	**	N/A	230	171-282	289		284-292	20	)8	10-410	
			(13.5 gpg)	(16.9 gr		pg)	(12		gpg)		
Lead	0.015+	N/A	<0.0010	N/A	<0.00	)5	N/A	<0.008		N/A	
Nickel	0.1	0.1	0.001	N/A	<0.001		N/A	0.011		0.006-0.016	
Nitrate	10.0	10.0	0.2	N/A	<0.2		N/A	1.9		0.28-4.7	
Nitrite	1.0	1.0	<0.1	N/A	N/A <0.1		N/A <0		.5	N/A	
Percholorate	**	N/A	<0.004	N/A	0.0051		N/A	<0.0	004	N/A	
pH (in pH units)	**	N/A	7.6	6.9-8.1	7.75		7.48-8.11	7.8		7.1-8.7	
Radium 226, 228 (pCi/L)	5	N/A	<0.6	N/A	<0.6 N/A		N/A	0.6		N/A	
Selenium	0.05	0.05	0.0016	N/A	<0.00	2	N/A	<0.005		N/A	
Sodium	**	N/A	162	25-190	90		86-93 1		36	55-220	
Tetrachloroethene (PCE)	0.005	0	<0.0005	N/A <0.0006		06	N/A 0.0		009	0.0005-0.0013	
Total Dissolved Solids	**	N/A	580	310-776	651 600-696		600-696	555		160-900	
Total Trihalomethanes	0.00	N1/0	0.007	0.0005.0.070	0.046	0.040		N/A		N1/0	
(TTHMs)	0.08	N/A	0.037	0.0005-0.076	0.042		<0.002084			N/A	
Turbidity (NTU)	0.5	N/A	80.0	0.061-0.151	0.07		0.05-0.09	N/		N/A	
Total Coliforms	MCL: No more than 5% of monthly samples may be total coliform positive  MCLG  0  Yearly average of the samples may be total coliform positive							ge Monthly range 0.00-0.05%			

#### **Possible sources:**

Arsenic Natural deposits; Orchard runoff **Barium** Drilling waste; Discharge from metal refineries; Natural deposits

Chloride Natural deposits

By-product of drinking water disinfection Chlorite **Di(2-ethylhexyl)phthalate** Chemical & plastics discharge

Fluoride Natural deposits; Water additive

**Gross Alpha** Natural deposits

**HAAs** By-product of drinking water disinfection **Nickel** Mining discharge; Natural deposits Nitrate/Nitrite Fertilizer runoff; Septic tank leaching;

Natural deposits

Radium 226, 228 Natural deposits

Selenium Discharge from petroleum & metal refineries;

Natural deposits

Factory & dry cleaner discharge **PCE Total Coliforms** Human & animal fecal waste

**TTHMs** By-product of drinking water disinfection

**Turbidity** Soil runoff

# Important drinking water definitions:

MCL Maximum Contaminant Level: The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Less than amount indicated

Limits are not set for these parameters

Grains per gallon (water softener terminology)

MFL Million fibers per liter

All units are in milligrams per liter or parts per million

Nephalometric turbidity units

PicoCuries per liter, measurement for radiochemicals High and low measurements reported during year

Action level for corrosion control treatment

Providing safe, clean drinking water for you and your family

> City of Mesa 2003 Water Quality Report

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